

III. *An Account of the Falls of the River Niagara, taken at Albany, Octob. 10. 1721. from Monsieur Borassaw, a French Native of Canada. By the Honourable Paul Dudley, Esq; F. R. S.*

THE Falls of *Niagara* are a mighty Ledge or Precipice of solid Rock, that lies across the whole breadth of the River (a little before it empties it self into, or forms the Lake *Ontario*) and very steep.

Monsieur *Borassaw* never measur'd the Falls himself, though he has been there at seven different Times: But what he says is, That,

This last Spring the Governour of *Canada*, Monsieur *Vaudreil*, ordered his own Son, with three other Officers, viz. Messieurs *Longue Isle*, *St. Ville*, and *Laubineau* to Survey *Niagara*, and take the exact height of the Cataract, which they accordingly did with a Stone of half an hundred Weight, and a large Cod-line, and found it upon a Perpendicular no more than twenty six Fathom; his Words were *Vingt & Six Bras*.

This differs very much from the Account Father *Hennepin* has given the World of that Cataract, for he makes it an hundred Fathom; and our Modern Maps from him, as I suppose, mark it at six hundred Feet; but I believe *Hennepin* never measured it, and there is no guessing at such Things.

When

When I objected *Hennepin's* Account of those Falls, to Monsieur *Borassaw*, he replied ; That accordingly every Body had depended upon it as right until the late Survey. Upon further Discourse he acknowledged, That below the Cataract for a great way, there were numbers of small Ledges, or Stairs cross the River, that lower'd it still more and more, till you come to a Level ; so that if all the Descents be put together, he does not know but the Difference of the Water above the Falls, and the Level below, may come up to Father *Hennepin*, but the strict and proper Cataract upon a perpendicular, is no more than twenty six Fathom, or an hundred and fifty six Foot, which yet is a prodigious Thing, and what the World I suppose cannot parallel, considering the greatness of the River, for it is near a Quarter of an *English* Mile broad, and very deep Water.

Several other Things Monsieur *Borassaw* set me right in, as to the Falls of *Niagara*. Particularly it has been said, That the Cataract makes such a prodigious noise, that People can't hear one another speak, at some Miles distance, whereas he affirms, you may converse together close by.

I have also heard it positively asserted, That the Shoot of the River, when it comes to the Precipice, was with such a mighty force, that Men and Horse might march under the Body of the River without being wet. This also he utterly denies, and says the Water falls in a manner right down.

What he observ'd farther to me was,

That the Mist or Shower (his Word was *La Brume*) which the Falls make, is so extraordinary, as to be
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seen at five Leagues distance, and rises as high as the common Clouds. In this Brume or Cloud, when the Sun shines, you have always a glorious Rainbow.

Of the River it self, which is there called the River *Niagara*, he tells me it is much narrower at the Falls, than either above or below, and that from below there is no coming nearer the Falls by Water, than about six *English* Miles, the Torrent is so rapid, and withal such terrible Whirl-pools.

He confirms Father *Hennepin's* and Mr. *Kellug's* Account of the large Trouts of those Lakes, and solemnly affirmed there was one taken lately, that weighed eighty six Pounds; which I am the rather inclined to believe upon the general Rule that Fish are according to their Waters. To confirm which, a very worthy Minister, now alive in *New England*, affirmed to me; That while he was a Prisoner at *Mon-real*, in *Canada* River, he saw a Pike brought up one Day from the River to the Governour's House, and carried upon a Pole between two Men, that measured Five Foot, and Ten Inches long, and proportionably large.

I my self this last Summer, saw a Cataract, three Leagues above *Albany*, in the Province of *New York*, upon *Schenectada* River called the *Cohoes*, which they count much of there; and yet that is not above 40 or 50 Foot perpendicular. From these Falls also there rises a misty Cloud, which descends like small Rain, that, when the Sun shines, gives a handsome small Rainbow that moves as you move, according to the Angle of Vision. The River at the *Cohoes* is to 40 or 50 Rods broad, but then it is very shallow Water, for I was told that in a dry Time, the whole River runs in a Channel of not more than fifteen Foot wide.

In my Journey to *Albany*, 20 Miles to the Eastward of *Hudson's River*, near the middle of a long rising Hill, I met with a brisk noisy Brook sufficient to serve a Water-Mill, and having observed nothing of it at the beginning of the Hill, I turned about and followed the Course of the Brook, till at length I found it come to an End, being Absorb'd, and sinking into the Ground, either passing through Subterraneous Passages, or soaked up with the Sand; and tho' it be common in other Parts of the World for Brooks and even Rivers thus to be lost; yet this is the first of the Sort, I have heard of, or met with in this Country.

P. Dudley.

IV. *A Letter from Mr. Leeuwenhoeck, F. R. S. concerning the Muscular Fibres in several Animals, and the Magnetick Quality acquired by Iron, upon standing for a long time in the same Posture.*

Delft, Apr. 21st, 1722.

To the Illustrious Royal Society.

Honoured Sirs,

I N a Letter I receiv'd sometime ago from one of your Secretaries, among many Expressions of your kind Acceptance of my Labours. I am requested by that Gentle-